

**REMARKS**

Claims 1-45 are pending in the application and have been rejected.

The instant amendments to claims 2, 5, 9, 25, and 28 obviate the indefiniteness rejection interposed in the Office Action.

The instant amendment to claim 32 obviates the objection to that claim which was raised in the Office Action.

Claims 1, 6-9, 12, 13, 24, 29-31, 34, and 35 have been rejected under 35 U.S.C. § 103(a) as being obvious over United States Patent No. 4,115,494 ("*Valyi*") in view of United States Patent No. 4,143,453 ("*Taluba*").

Claims 5, 10, 11, 14-23, 28, 33, and 36-45 have been rejected under 35 U.S.C. § 103(a) as being obvious over *Valyi* in view of *Taluba* and further in view of United States Patent No. 6,403,003 ("*Fekete*").

Claims 2-4 and 25-27 have been rejected under 35 U.S.C. § 103(a) as being obvious over *Valyi* in view of *Taluba* and *Fekete* and further in view of and further in view of United States Patent Nos. 6,733,716 ("*Belcher*") and 2,702,411 ("*Winstead*").

Applicants traverse each of the aforementioned rejections and maintain that, as explained hereinafter, the pending claims as amended herein are patentable over the prior art.

**1. Claims 1, 6-9, 12, 13, 24, 29-31, 34, and 35 Are  
Patentable Over *Valyi* In View of *Taluba*.**

**(a) Claims 1 and 24.**

*Valyi*'s and *Taluba*'s processes differ fundamentally from those of the instant invention and claims 1 and 24 are patentable over *Valyi* and *Taluba*, whether those references are taken alone or in any combination.

Processes of the claimed invention use a second mold at the blow station. The second mold comprises an exterior mold front section, the rear section of a first mold, and an interior core. As specified in amended claim 1, the exterior mold front section and the rear section of the first mold exterior sections are oriented latitudinally relative to one another. The exterior sections of the second mold are spaced apart from the interior core

to define a cavity in the shape of the entirety of the hollow article. A vacuum is drawn on, and compressed gas is injected into, the second mold, thereby dispersing a parison relatively evenly, and with a substantially uniform thickness, against the second mold cavity interior surface to form a hollow article.

Applicant's invention injects a parison directly into part of the final blow mold, whereas *Valyi* injects a parison into a form mold, releases the parison from the form mold, and transfers the parison to another blow mold in order to blow mold the final part. Also, in *Valyi*, the blow mold is a split mold that allows the blown object be released from the blow cavity without any undercut along the direction of the released part. In contrast, Applicant's claimed invention can be used to make elastomeric articles in which an undercut is allowed in the direction of part release.

Further, *Valyi* does not disclose that an exterior mold front section which is oriented latitudinally relative to the rear section of a first mold exterior section can be used to disperse a parison relatively evenly, and with a substantially uniform thickness, against the second mold cavity interior surface, as in claims 1 and 24. Figure 2B of *Valyi* - which the Examiner relies on as an alleged disclosure of this feature - in fact only shows that blow core 15 and parison 16 are located within blow mold 23 and that the parison is expanded in conformity with the cavity of blow mold 23. See *Valyi*, column 4, lines 18-38. *Valyi* does not indicate that this conventional configuration of blow core, parison, and blow mold disperses the parison relatively evenly, and with a substantially uniform thickness, against the interior surface of the blow mold. Rather, *Valyi* attempts to solve the problem of temperature variation during injection molding steps by transferring an expanded parison to a retaining mold in which the parison temperature may vary. See *Valyi*, column 1, lines 50-59. *Valyi's* processes would not be useful in making an article such as a hollow doll head with a latitudinal parting line defined by first and second molds as used in the process of claim 24..

The Examiner concedes that *Valyi* does not disclose making a hollow article having an opening for removing the interior core, wherein the diameter of the opening is smaller than the diameter of the core to pass through the opening. But he maintains that

this feature is disclosed in *Taluba*. Per the Examiner, it would have been obvious to those of ordinary skill in the art as of the effective filing date of the instant application to adapt the blow pin configuration of *Taluba* to the process of *Valyi* to facilitate the manufacture of readily attachable doll appendages. This position misapprehends *Taluba* and *Valyi* and is grounded on impermissible hindsight.

*Taluba* describes a method of blow molding a doll head using elastomers and a traditional blow molding technique, which includes a downwardly extended annular lip having a semicircular groove at the front of the neck. The blow mold method of *Taluba* is similar to the one described in *Belcher* (*see infra*), in which a parison and split blow mold are used and a split line is formed along the side of the doll head.

Unlike *Taluba*, Applicant's claimed invention does not involve the use of downwardly extended annular lip at the neck.

Also, unlike *Taluba*, processes of claims 1 and 24 use a first mold comprising exterior mold sections and an interior core which extends vertically through the first mold, and articles made by the claimed invention can have a substantially narrower diameter than that of the interior core. *Taluba's* blow pin does not extend vertically through the mold cavity; as depicted in *Taluba's* figures, the blow pin has a neck portion that tapers to a diameter which is only slightly smaller than the depicted doll head neck. *Taluba* describes the removal of the doll head from the blow pin as being "conventional" and as involving the use of a stripper plate. *See Taluba*, column 4, lines 2-10. While *Taluba* indicates that a doll head made by his process will attach securely to a doll neck (*see* column 6, lines 29-30), there is no indication in *Taluba* such attachment approximates the affixation achieved by narrow diameter articles made by the invention of claims 1 and 24.

*Valyi* is not concerned with whether the article made by his process will attach readily to another object. Like *Taluba*, *Valyi* merely states that articles made by his process can be removed from the mold by conventional techniques. *See Valyi*, column 4, lines 47-51.

Therefore, prior to the effective filing date of claims 1 and 24, there was no suggestion or motivation that would have led those of ordinary skill in the art to modify and combine the disclosures of *Valyi* and *Taluba* in the manner advocated by the Examiner, nor was there a reasonable expectation that such modifications and combinations would prove successful. See *Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339, 65 U.S.P.Q.2d 1961, *reh'g en banc denied* 2003 U.S. App. LEXIS 11897 (Fed. Cir. May 28, 2003)( a showing of obviousness requires a motivation or suggestion to combine or modify prior art references, coupled with a reasonable expectation of success).

The only way the prior art could have been modified and combined as suggested by the Examiner was to have used the invention of Applicants' claims as a template. In other words, the Examiner resorted to impermissible hindsight in evaluating the obviousness of the claims at issue. *In re Kotzab*, 217 F.3d 1365, 55 U.S.P.Q.2d 1313 (Fed. Cir. 2000).

**(b) Claims 6, 7, 29, and 30.**

Insofar as dependent claims 6, 7, 29, and 30 are concerned, the Examiner, in assessing the obviousness of those dependent claims, has ignored the aforementioned limitations of claims 1 and 24, from which claims 6, 7, 29, and 30 depend, either directly or indirectly. Those limitations are included in claims 6, 7, 29, and 30 and provide bases to distinguish the dependent claims over *Valyi* and *Taluba* for the reasons provided above. See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 U.S.P.Q. 81 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987)(obviousness must be assessed by analyzing the claimed invention when taken as a whole, rather than by focusing on the obviousness of particular substitutions and differences; claim limitations cannot be ignored in assessing obviousness).

**(c) Claims 8, 9, 13, 31, 34, and 35.**

The Examiner, in assessing the obviousness of claims 8, 9, 13, 31, 34, and 35, also ignored the aforementioned limitations of claims 1 and 24, from which claims 8, 9,

13, 31, 34, and 35, depend, either directly or indirectly. This was improper, as explained in the previous section.

Beyond ignoring the independent claim limitations which distinguish claims 8, 9, 13, 31, 34, and 35 from *Valyi* and *Taluba*, the Examiner also mistakenly asserted that *Valyi* discloses dependent claim features which in fact are absent from that reference.

*Valyi*, at column 9, lines 7-13, does not disclose simultaneously drawing a vacuum on and injecting a compressed gas into a second mold. *Valyi* indicates that compressed gas can be injected and a vacuum drawn, but does not state that both steps could occur together.

**2. Claims 5, 10, 11, 14-23, 28, 33, and 36-45 Are  
Patentable Over *Valyi* In View of *Taluba* and *Fekete*.**

As explained above, as of the effective filing date, there was no motivation for skilled artisans to combine *Valyi* and *Taluba* in the manner asserted by the Examiner. Accordingly, the premise of the Examiner's obviousness rejections of claims 5, 10, 11, 14-23, 28, 33, and 36-45 - viz., that *Valyi* and *Taluba* can be properly combined - is flawed. In a further exercise of hindsight, the Examiner contends that *Fekete* provides those limitations of claims 5, 10, 11, 14-23, 28, 33, and 36-45 which are not otherwise found in the asserted combination of *Valyi* and *Taluba*.

The undercut ratio is the ratio of the major hollow dimension over the opening dimension through which the core is removed.

*Fekete* clearly indicates that there is a limitation to the undercut ratio used in his technique; for materials having a hardness above 40 shore A, *Fekete* indicates that a single core may be used with an undercut ratio up to about 2. The core size in *Fekete* is more or less the actual head size minus the skin thickness.

Most doll heads have a hardness over 60 shore A, and some dolls with bigger heads and small necks (e.g., the popular Bratz® doll) have an undercut ratio of three and higher. Applicant's claimed invention employs a different approach than *Fekete* by forming a final version of a doll head through expansion of elastomeric material by a process which results in a head to neck opening ratio of as great as six.

Unlike *Fekete*, there is no direct, limiting relationship between doll head size and neck opening when Applicant's process is used. Applicant's invention is also distinguishable from *Fekete* in that the expanded doll head formed by the claimed process is much bigger than the core (e.g., over three times the size of conventional cores). In Applicant's invention, the core to neck opening ratio can be as low as two, which results in a head to neck opening ratio up to six, as opposed to *Fekete*'s maximum head to neck opening ratio of three.

Applicant's process is therefore useful in making a doll head having a higher head size to neck opening undercut ratio, and is especially useful in making larger doll heads with a small neck opening. In Applicant's claimed process, the location of the parting line is a matter of tool structure. In contrast to *Fekete*, Applicant's claimed process can make a doll head with circular split line at any desired location above the core, since the process is well-suited for use with thinner and more flexible elastomeric materials

Accordingly, claims 5, 10, 11, 14-23, 28, 33, and 36-45 are patentable over *Valyi*, *Taluba*, and *Fekete*, whether taken alone or in any combination.

**3. Claims 2-4 and 25-27 Are Patentable Over *Valyi* In View of *Taluba* and *Fekete* and Further in View of *Belcher* and *Winstead***

As explained above, as of the effective filing date, there was no motivation for skilled artisans to combine *Valyi*, *Taluba*, and *Fekete* in the manner asserted by the Examiner. Accordingly, the premise of the Examiner's obviousness rejections of claims 2-4 and 25-27 - viz., that *Valyi*, *Taluba*, and *Fekete* can be properly combined - is flawed. In a further exercise of hindsight, the Examiner contends that *Belcher* and *Winstead* provides those limitations of claims 2-4 and 25-27 which are not otherwise found in the asserted combination of *Valyi*, *Taluba*, and *Fekete*.

*Belcher* describes making a stretch/blow molded article (bottle) with an integral projection such as a handle. *Belcher* merely varies traditional blow molding techniques by including a movable segment in the mold to form a handle. There is no suggestion in

*Belcher* to modify the disclosed process to incorporate all of the limitations of claims 2-4 and 25-27.

Similarly, *Winstead* only discloses a thermoforming process for making plastic film or sheeting. As with *Belcher*, there is no suggestion in *Winstead* to modify the disclosed thermoforming process to incorporate all of the limitations of claims 2-4 and 25-27.

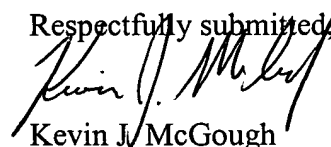
Accordingly, 2-4 and 25-27 are patentable over *Valyi, Taluba, Fekete, Belcher* and *Winstead*, whether taken alone or in any combination.

#### **4. Conclusion.**

As set forth above, the permutations and modifications of *Valyi, Taluba, Fekete, Belcher*, and *Winstead* which provide the bases of the Examiner's obviousness rejections are grounded on impermissible hindsight. Each of the pending claims are patentable over *Valyi, Taluba, Fekete, Belcher*, and *Winstead*, whether those references are taken alone or in any combinations.

Accordingly, Applicants respectfully request that the rejections of claims 1-45 be withdrawn and that all of those claims be passed to issue.

Respectfully submitted,



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